

### REMARKS

Applicants appreciate the detailed examination evidenced by the Office Action mailed November 20, 2006 (hereinafter "Office Action"). Claims 1, 3-10, 12-19, 21-28, and 30-35 remain pending in the application after entry of this amendment. Applicants respectfully provide amendments to the claims in which Claims 1, 10, 19, 28, 30, 32, and 34 are amended and Claims 2, 11, and 20 are canceled. Applicants have further provided remarks herein detailing why the cited references do not disclose all the recitations of the pending claims. Applicants respectfully submit that the pending claims are patentable for at least the reasons described herein.

#### **Independent Claims 1, 10, 19, 28, and 32 are patentable over Chung et al.**

Claims 1-3, 5-12, 14-21, 23-28, 30-32 and 34-35 stand rejected under 35 U.S.C. § 102 as anticipated by "Integrated Simulation of Equipment and Topography for Plasma Etching in the DRM Reactor," by W.Y. Chung, J.J. Oh, T.K. Kim, J.K. Shin, K. Seo, Y.K. Park, and J.T. Kong, 2000 IEEE (hereinafter "Chung"). Applicants respectfully traverse the rejection as Chung does not disclose or suggest all of the recitations of Claims 1, 10, 19, 28 and 32. For example, Claim 1, recites, in part:

generating a generalized model of the plasma from the computed plasma characteristics for the plurality of cross-sections,  
wherein the plurality of moving magnets rotate about an axis of rotation, and wherein ***each of the plurality of cross-sections includes the axis of rotation.***

(*Emphasis added.*) Claims 10, 19, 28 and 32 include similar recitations. The Office Action asserts that:

Chung discloses the plurality of moving magnets rotate about an axis of rotation, and wherein each of the plurality of cross-sections includes the axis of rotation (analogous to "...the magnetic fields arising from the rotating magnets." Page 127, Right side column, lines 3-7.

Office Action, page 3. Applicants note that Chung describes that "plasma parameters are computed at several 2-dimensional cross-sections with a distinctive magnetic field distribution." Chung, left column, lines 1-3. Although Chung appears to describe that plasma parameters are computed at 2-dimensional cross-sections, Chung does not disclose or

suggest that each of the plurality of cross-sections includes the axis of rotation, as recited in Claim 1. Applicants respectfully submit that the cited passage of Chung includes no mention of cross-sections that include the axis of rotation. Thus, Chung fails to disclose or suggest "each of the plurality of cross-sections includes the axis of rotation." Accordingly, Chung does not provide the teachings alleged in the Office Action. For at least the foregoing reasons, Applicants submit that Claim 1 is patentable. Applicants submit that independent Claims 10, 19, 28 and 32 are patentable for at least similar reasons.

Applicants respectfully submit that the amendments to the independent claims include subject matter that was recited in several of the original dependent claims. For this reason, Applicants submit that the amendments include no new matter and, therefore, a new search is not necessary. In this regard, Applicants respectfully request that any rejection based on new references be made non-final.

#### **The Dependent Claims Are Patentable**

Applicants submit that the dependent claims are patentable at least by virtue of the patentability of the various ones of independent Claims 1, 10, 19, 28, and 32 from which they depend.

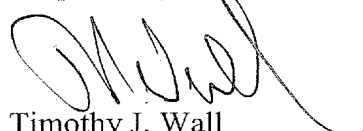
#### **Conclusion**

Applicants submit that the objections to the specifications and claims have been overcome, and that the claims are patentable for at least the reasons discussed above. Applicants respectfully request allowance of the claims and passing of the application to

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issue in due course. Applicants encourage the Examiner to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,

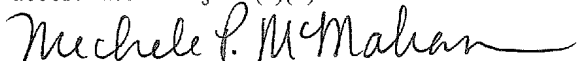


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**CERTIFICATION OF TRANSMISSION**

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on February 14, 2007.



Michele P. McMahan

Date of Signature: February 14, 2007